



## **LISBON VALLEY MINING CO**

March 1, 2007

Mr. Frank Bain  
US Bureau of Land Management  
82 East Dogwood  
Moab Utah 84532

Re: **2006 Waste Rock Monitoring Report.** Lisbon Valley Mining Company LLC. 920 South County Road 313, La Sal, Utah, 84530.

Dear Frank:

This Waste Rock Sampling Report (the 2006 Report) has been prepared in accordance with the Lisbon Valley Mining Co (LVMC) 2005 Waste Rock Sampling Plan (the Sampling Plan).<sup>1</sup> The 2006 Report documents waste rock characterization, handling, encapsulation, and pit bench mapping at the Lisbon Valley Mine (the Mine) in 2006.

The scope of work included the following:

- Waste rock sampling and analysis.
- Waste rock handling encapsulation.
- Waste dump mapping.
- Pit bench mapping.

### ***Background***

Copper mineralization at the Mine is primarily comprised of oxide ore which occurs in the Cretaceous Burro Canyon Formation and Dakota Sandstone. Sulfide ores occur where these beds are buried under Quaternary alluvium and Cretaceous shale. The Mine stratigraphy is subdivided into 17 specific sedimentary beds.<sup>2</sup>

<sup>1</sup> LVMC 2005 Waste Rock Sampling Plan. Lisbon Valley Mining Company LLC. 20 December 2005

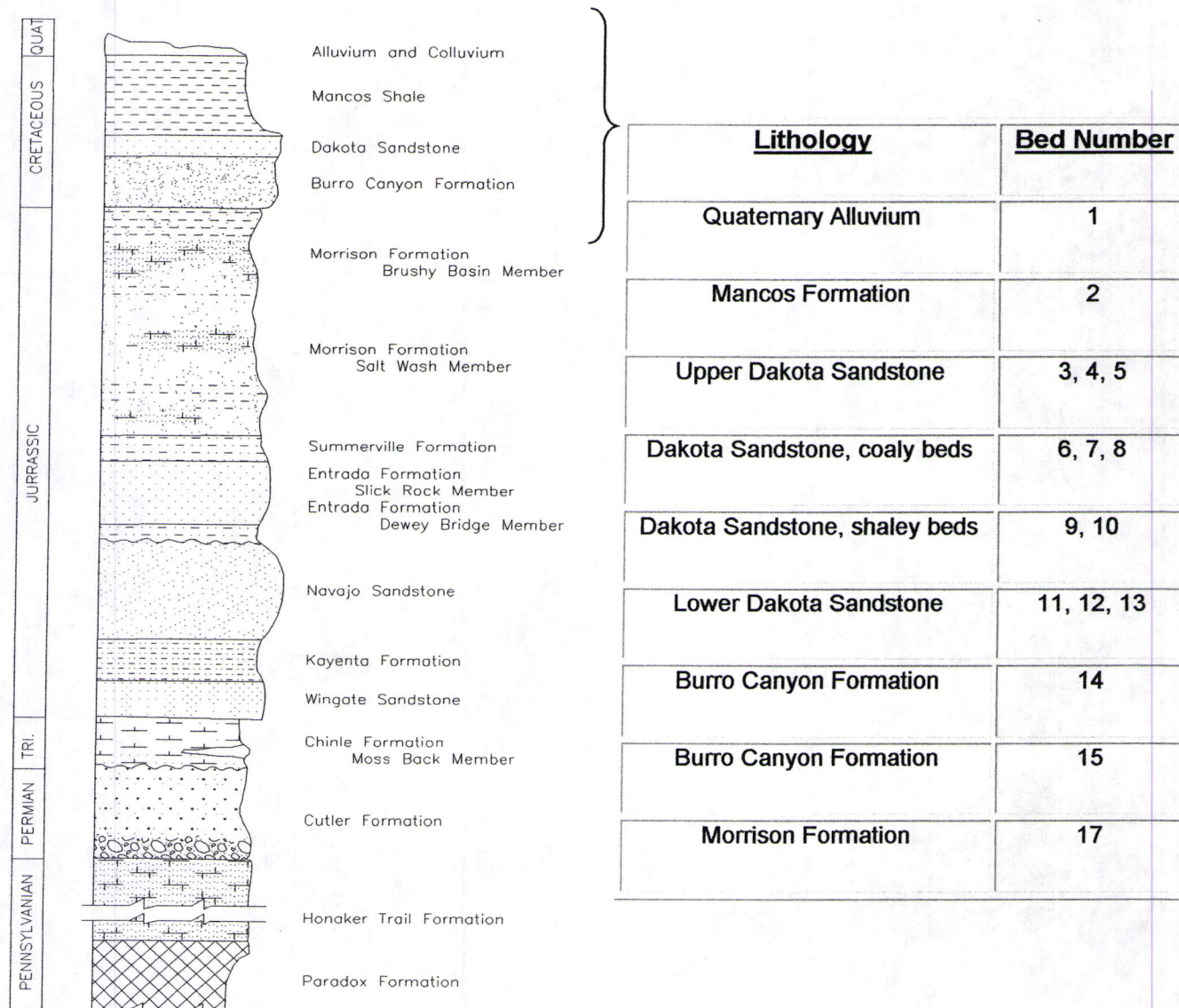
<sup>2</sup> Beaty D. 1975. Stratigraphy in the Centennial Pit Area. Appendix 2 5pp. from Summo USA, Corp.internal files

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Figure 1 identifies the LVMC system of bed nomenclature relative to the generalized section of sedimentary rocks exposed in the La Sal Utah Quadrangle. Copper ore occurs in Beds 3-15.



**Figure 1**  
**La Sal Stratigraphy and LVMC Bed Nomenclature**

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Beds 1-15 are grouped into seven rock types based on lithology and acid generation potential (AGP). The rock type groupings are visibly discernable by Mine personnel, which ensures proper handling of waste rock with AGP. Rock type designations are listed in Table 1.

<b>Specific Lithology</b>	<b>Bed Number</b>	<b>Acid Generation Potential</b>	<b>Rock Type Designation</b>
Quaternary Alluvium	1	-	1
Mancos Shale Formation	2	-	2
Upper Dakota Sandstone	3, 4, 5	-	3
Dakota Sandstone, coaly beds	6, 7, 8	+	4
Dakota Sandstone, shaley beds	9, 10	+	5
Lower Dakota Sandstone	11, 12, 13	-	6
Burro Canyon Formation	14, 15	-	7
Navajo Sandstone.	NA	-	8

**Table 1**  
**LVMC Rock Type Designations**

## **2006 Mining Activities**

The LVMC mined approximately 6393 kilotons (kt) of waste rock from three pits in 2006. Approximately 2729 kt were mined from the Centennial pit, 2451 kt were mined from the Sentinel West pit, and 1212 kt were mined from the Sentinel East pit.

### **Waste Rock Sampling and Analysis**

In accordance with the Sampling Plan, waste rock samples were comprised of blast hole samples and composite bulk samples.

Blast hole samples were collected for acid/base accounting (ABA) using a sodium hydroxide back titration procedure.<sup>3</sup> Composite bulk samples were collected to identify the potential dissolution of metals using the Meteoric Water Mobility Procedure (MWMP).<sup>4</sup> The MWMP evaluates the dissolution of antimony, arsenic, uranium, cadmium, copper, molybdenum, selenium, and zinc by meteoric water.<sup>5</sup>

### **Sampling Locations**

The Sampling Plan identifies nine "standard" waste rock sampling locations; two in the Sentinel West pit, two in Sentinel East pit, and five in Centennial pit.<sup>6</sup>

In 2006, active mining was conducted in five sampling locations, #1 and #2 in Sentinel West, #1 and #2 in Sentinel East, and #1 in Centennial. Samples were collected from each rock type mined in each of the pits closest to the "standard" sampling location. Standard sampling locations are identified in Table 2 and shown on Figure 2.

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<sup>3</sup> EPA 1995. Available neutralization potential in mine samples by NaOH back titration. Modified version for commercial laboratory use. Method AL0242.

<sup>4</sup> ACZ Laboratories, Inc., 2773 Downhill Dr., Steamboat Springs, CO 80487

<sup>5</sup> Meteoric Water Mobility Procedure, Bureau of Mining Regulation and Reclamation, Nevada Division of Environmental Protection, 9/19/9

<sup>6</sup> The "standard" sampling locations will change as the pit benches step inward. An expanded discussion of sampling locations is included in the Sampling Plan.







### ***2006 Waste Rock Sampling Results***

The 2006 ABA results indicated a net acid neutralization potential in all samples except one, ranging from -1.8 tons  $\text{CaCO}_3$ /1000 tons waste (tons  $\text{CaCO}_3$ ) to 97.5 tons  $\text{CaCO}_3$ . The average of all results (2005-2006) is 19.85 tons  $\text{CaCO}_3$ . These results compare favorably with previous studies, which indicate that the bulk of waste rock produced by the LVMC is strongly acid neutralizing.<sup>7</sup>

The 2006 MWMP results identified the dissolution of copper, uranium, zinc, cadmium, and selenium. With the exception of copper, the 2006 results are comparable to concentrations measured from the same rock types in previous studies.<sup>8</sup>

The 2006 waste rock sampling results are tabulated in Table 3. Laboratory reports are attached as Appendix A.

### ***2006 Waste Rock Placement and Encapsulation***

All waste rock mined in 2006 was placed in Waste Dump C. A breakdown of rock types is compiled in Table 4.

### ***Waste Dump As-Built Mapping***

The LVMC plans, builds, and monitors its waste dumps in spatial coordinates using a Geographic Information System (GIS). The same process documents the placement of waste rock with AGP. These rocks (Rock Types 4 and 5) are dark gray and visibly discernable from the remaining (acid neutralizing) rock types.

Figure 3 shows the perimeter of Waste Dump C at the end of 2006. The location of waste rock types 4 and 5 are outlined as shape files.

### ***Pit Bench As-Built Mapping***

The LVMC documents the location, thickness, and elevation of Beds 1-15 in each pit as part of the Mine plan. For the 2006 Report, beds were converted to rock types. An as-built map of each pit is included in Appendix B.

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<sup>7</sup> BLM 1997. Final Environmental Impact Statement Lisbon Valley Copper Project, February, 1997.

<sup>8</sup> Adrian Brown 1997. Post-Mining Water Balance and Geochemical Model Report 1424A.970119. 19 January 1997.



**Table 3**  
**2005-6 Waste Rock Monitoring Results**  
**Lisbon Valley Mine**  
**La Sal, Utah**

Pit	Sample Type	Sample ID	Date	Results	
				Titration (tons CaCO <sub>3</sub> /1000 tons waste)	MWMP Detection (mg/L metals)
					Copper 0.05 Uranium 0.0003 Zinc 0.01
Sentinel West	Bulk Composite	Sent. West	4th Qtr 2005		
Sentinel West	Bulk Composite	Sent. West	1st Qtr 2006		Uranium 0.0011
Sentinel West	Bulk Composite	Sent W 14 6380-6400	2nd Qtr 2006		Uranium 0.0026
Sentinel West	Bulk Composite	Sent W 6380 14	3rd Qtr 2006		Antimony 0.0009 Uranium 0.0007 Antimony 0.0008 Arsenic 0.06 Cadmium 0.060 Copper 0.03 Uranium 0.082 Zinc 1.89
Sentinel West	Bulk Composite	Sent W 6340 Bed 6-8	4th Qtr 2006		Cadmium 0.0014 Copper 0.04 Uranium 0.0093 Zinc 0.37
Sentinel West	Bulk Composite	Sent W 6340 Bed 3-5	4th Qtr 2006		Cadmium 0.029 Copper 0.06 Uranium 0.0176 Zinc 1.44
Sentinel West	Bulk Composite	Sent W 6340 Bed 9-10	4th Qtr 2006		
Sentinel West	Bulk Composite	Sent W Bed 14	4th Qtr 2006		Molybdenum 0.01 Uranium 0.0018
Sentinel West	Drill Pulp	6540 10 75	4th Qtr 2005	14.4	
Sentinel West	Drill Pulp	6520 10 70	4th Qtr 2005	20.7	
Sentinel West	Drill Pulp	6400 10 119	2nd Qtr 2006	16.8	
Sentinel West	Drill Pulp	6420 10 856	1st Qtr 2006	17.9	
Sentinel West	Drill Pulp	6440 10 707	1st Qtr 2006	9.9	
Sentinel West	Drill Pulp	6360 10 2940	2nd Qtr 2006	125	
Sentinel West	Drill Pulp	6360 10 2943	2nd Qtr 2006	41.15	
Sentinel West	Drill Pulp	6360 10 3182	3rd Qtr 2006	2.49	
Sentinel West	Drill Pulp	6360 10 3216	3rd Qtr 2006	0.98	
Sentinel West	Drill Pulp	6340 10 241	4th Qtr 2006	0.15	
Sentinel West	Drill Pulp	6340 10 2643	4th Qtr 2006	44.64	
Sentinel West	Drill Pulp	6320 10 1427	4th Qtr 2006	1.57	
Sentinel West	Drill Pulp	6320 10 2887	4th Qtr 2006	32.77	
					Copper 0.02 Uranium 0.0021 Zinc 0.01
Sentinel East	Bulk Composite	Sent. East	4th Qtr 2005		
Sentinel East	Bulk Composite	Sent. East	1st Qtr 2006		Molybdenum 0.02 Uranium 0.0008 Cadmium 0.028 Copper 0.10 Uranium 0.0021 Zinc 2.03
Sentinel East	Bulk Composite	Sent E9-10 6380-6400	2nd Qtr 2006		Cadmium 0.014 Copper 12.50 Selenium 0.05 Uranium 0.0011 Zinc 0.77
Sentinel East	Bulk Composite	Sent E 6-8 6380-6420	2nd Qtr 2006		Molybdenum 0.02 Zinc 0.09
Sentinel East	Bulk Composite	Sent E11-13 6380-6400	2nd Qtr 2006		Zinc 0.03
Sentinel East	Bulk Composite	Sent E 14 6380-6400	2nd Qtr 2006		Cadmium 0.008 Copper 0.23 Uranium 0.0028 Zinc 0.04
Sentinel East	Bulk Composite	Sent E 6340 3-5	2nd Qtr 2006		Molybdenum 0.06 Uranium 0.0003 Zinc 0.02
Sentinel East	Bulk Composite	Sent E 6340 11-13	3rd Qtr 2006		Uranium 0.0012
Sentinel East	Bulk Composite	Sent E 6340 14	3rd Qtr 2006		Cadmium 0.008 Copper 0.11 Uranium 0.0018 Zinc 1.13
Sentinel East	Bulk Composite	Sent E 6340 9-10	3rd Qtr 2006		Cadmium 0.026 Copper 0.07 Uranium 0.0482 Zinc 3.95
Sentinel East	Bulk Composite	Sent E 6340 6-8	3rd Qtr 2006		Uranium 0.0014
Sentinel East	Bulk Composite	Sent E 6300 Bed 14	4th Qtr 2006		
Sentinel East	Drill Pulp	6540 20 56	4th Qtr 2005	38	
Sentinel East	Drill Pulp	6560 20 95	3rd Qtr 2005	97.5	
Sentinel East	Drill Pulp	6400 20 376	1st Qtr 2006	27.7	
Sentinel East	Drill Pulp	6400 20 530	1st Qtr 2006	3.3	
Sentinel East	Drill Pulp	6440 20 40	1st Qtr 2006	9.2	





Table 3  
2005-6 Waste Rock Monitoring Results  
Lisbon Valley Mine  
La Sal, Utah

Sentinel East	Drill Pulp	6320 20 81	2nd Qtr 2006	30.7	
Sentinel East	Drill Pulp	6320 20 328	2nd Qtr 2006	-2.5	
Sentinel East	Drill Pulp	6320 20 80	3rd Qtr 2006	0.16	
Sentinel East	Drill Pulp	6320 20 375	3rd Qtr 2006	0.16	
Sentinel East	Drill Pulp	6300 20 81	4th Qtr 2006	0.10	
Sentinel East	Drill Pulp	6300 20 161	4th Qtr 2006	12.08	
Centennial	Bulk Composite	Cent. 6-8	4th Qtr 2005		Cadmium 0.011 Copper 0.20 Uranium 0.0021 Zinc 0.46 Selenium 0.04 Uranium 0.0008 Zinc 0.04
Centennial	Bulk Composite	Cent. 6-10	4th Qtr 2005		
Centennial	Bulk Composite	Cent. 11-13	4th Qtr 2005		Uranium 0.0004
Centennial	Bulk Composite	Cent. 14	4th Qtr 2005		Uranium 0.0022
Centennial	Bulk Composite	Cent 6420 Bed 14	1st Qtr 2006		Molybdenum 0.01 Uranium 0.0009 Antimony 0.0010 Molybdenum 0.02 Uranium 0.0004
Centennial	Bulk Composite	Cent 6420 Bed 9-10	1st Qtr 2006		
Centennial	Bulk Composite	Cent 6420 Bed 11-13	1st Qtr 2006		Molybdenum 0.02 Uranium 0.0002 Cadmium 0.104 Copper 18.80 Uranium 0.0003 Zinc 0.68 Copper 0.01 Molybdenum 0.03 Uranium 0.0003
Centennial	Bulk Composite	Cent Bed 14 6420	2nd Qtr 2006		Uranium 0.0004
Centennial	Bulk Composite	Cent Bed 9-10 6420	2nd Qtr 2006		Non-Detect
Centennial	Bulk Composite	Cent Bed 11-13 6420	2nd Qtr 2006		Cadmium 4.670 Copper 9.47 Uranium 0.04 Zinc 10.90 Uranium 0.0007
Centennial	Bulk Composite	Cent 6400 6-8	3rd Qtr 2006		Cadmium 0.006 Copper 0.01 Uranium 0.016
Centennial	Bulk Composite	Cent 6400 14	3rd Qtr 2006		Cadmium 2.110 Copper 3.08 Molybdenum 0.01 Uranium 0.0013 Zinc 1.62
Centennial	Bulk Composite	Cent 6400 9-10	3rd Qtr 2006		Cadmium 0.095 Copper 0.10 Zinc 0.11
Centennial	Bulk Composite	Cent 6400 3-5	3rd Qtr 2006		Antimony 0.0005 Molybdenum 0.01 Uranium 0.0024
Centennial	Bulk Composite	Cent Bed 11-13	4th Qtr 2006		Cadmium 7.290 Copper 56.90 Uranium 0.0440 Zinc 4.90 Cadmium 3.880 Copper 3.42 Uranium 0.1110 Zinc 14.90
Centennial	Bulk Composite	Cent Bed 6-8	4th Qtr 2006		Antimony 0.0005 Uranium 0.0013 Cadmium 1.080 Copper 0.81 Uranium 0.0010 Zinc 5.49
Centennial	Bulk Composite	Cent Bed 9-10	4th Qtr 2006		
Centennial	Bulk Composite	Cent Bed 14	4th Qtr 2006		
Centennial	Bulk Composite	Cent Bed 3-5	4th Qtr 2006		
Centennial	Drill Pulp	6440 87 300	3rd Qtr 2005	3.4	
Centennial	Drill Pulp	6420 30 1882	4th Qtr 2005	2.6	
Centennial	Drill Pulp	6400 30 333	1st Qtr 2006	16	
Centennial	Drill Pulp	6400 30 480	1st Qtr 2006	4.9	
Centennial	Drill Pulp	6400 30 421	2nd Qtr 2006	-1.8	
Centennial	Drill Pulp	6400 30 2596	3rd Qtr 2006	3.52	
Centennial	Drill Pulp	6400 30 2818	3rd Qtr 2006	4.24	
Centennial	Drill Pulp	6400 30 3054	4th Qtr 2006	49.18	
Centennial	Drill Pulp	6380 30 2667	4th Qtr 2006	46.16	
Centennial	Drill Pulp	6380 30 3613	4th Qtr 2006	1.94	

Average 19.85



Table 4  
 2006 Waste Rock Placement  
 Waste Dump C  
 Lisbon Valley Mine  
 San Juan County, Utah

Bed	Tonnage			Totals
	Sentinel East	Sentinel West	Centennial	
RT1		34,582	79,900	114,482
RT2	82,778		519,969	602,747
RT4	6,381	71,412	267,984	345,777
RT5	47,472	61,301	351,005	459,778
RT6	56,268	22,112	248,282	326,662
RT7	126,154		628,320	754,474
RT8	893,437	2,261,803	335,195	3,490,435
			298,806	298,806
<b>Totals</b>	<b>1,212,490</b>	<b>2,451,210</b>	<b>2,729,461</b>	<b>6,393,161</b>





**Figure 3 Waste Dump C**  
**Lisbon Valley Mine, La Sal, Utah**

- Planned Dump Boundaries
- Waste Rock Types 4-5
- 2006 Dump Boundaries



## Summary and Conclusions

The LVMC handled approximately 6393 kt of waste rock in 2006. This waste was placed in Waste Dump C.

The ABA results demonstrate that the waste rock mined in 2006 is overall acid neutralizing. These results correlate favorably with baseline ABA testing (BLM 1997).

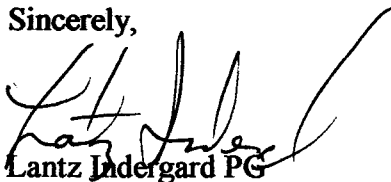
The MWMP results identified the dissolution of metals, including antimony, uranium, cadmium, copper, selenium, and zinc in the sample extract. The MWMP results are comparable with baseline MWMP testing of the same rock types (Adrian Brown 1997).

Additional sampling of all rock types will be conducted in 2007 in accordance with the Sampling Plan. The results will be compiled in a database for continued correlation with baseline testing.

The LVMC will continue to treat rock types 4 and 5 as acid-generating, and encapsulate this waste in acid-neutralizing waste near the center of dumps.

Please call Lantz Indergard at (435) 686 9950 #226 if you have any questions regarding this report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lantz Indergard', is written over the printed name.

Lantz Indergard PG  
Environmental Manager

cc. Paul Baker (UDOGM) Keith Eagan (UDEQ) Pat Gochnour

## Appendix A

May 03, 2006

## Report to:

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

## Bill to:

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

cc: Chuck Bauer, Susan Wyman

## Project ID:

ACZ Project ID: L56113

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 18, 2006. This project has been assigned to ACZ's project number, L56113. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L56113. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after June 03, 2006. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

03/May/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.





# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6420 BED 14(A)

ACZ Sample ID: **L56113-01**

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	05/02/06 9:06	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:10	jjc
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/03/06 1:10	jjc
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:10	jjc
Molybdenum (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	05/03/06 1:10	jjc
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:10	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0009	B	*	mg/L	0.0002	0.001	05/02/06 15:14	jjr
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:10	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	NDEP - MWMT, Sept. 19, 1990								
Dry Weight		4220			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		48			hrs			04/27/06 0:00	as/srs
Leachate pH		7.5			units			04/27/06 0:00	as/srs
Leachate Volume		3660			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		60.7			%			04/27/06 0:00	as/srs
Retained Moisture		5.5			%			04/27/06 0:00	as/srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6420 9-10(B)

ACZ Sample ID: **L56113-02**

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS	0.0010	B	*	mg/L	0.0008	0.004	05/02/06 9:20	jjr
Arsenic (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:27	jjc
Cadmium (MWMt)	M6010B ICP		U	*	mg/L	0.005	0.02	05/03/06 1:27	jjc
Copper (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:27	jjc
Molybdenum (MWMt)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	05/03/06 1:27	jjc
Selenium (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:27	jjc
Uranium (MWMt)	M6020 ICP-MS	0.0004	B	*	mg/L	0.0002	0.001	05/02/06 15:28	jjr
Zinc (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:27	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5310			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		30			hrs			04/27/06 0:00	as/srs
Leachate pH		7.1			units			04/27/06 0:00	as/srs
Leachate Volume		5170			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		68.8			%			04/27/06 0:00	as/srs
Retained Moisture		9.7			%			04/27/06 0:00	as/srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6420 11-13(C)

ACZ Sample ID: L56113-03

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	05/02/06 9:30	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:31	jjc
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/03/06 1:31	jjc
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:31	jjc
Molybdenum (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	05/03/06 1:31	jjc
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:31	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0002	B	*	mg/L	0.0002	0.001	05/02/06 15:37	jjr
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:31	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4980			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		30			hrs			04/27/06 0:00	as/srs
Leachate pH		7.1			units			04/27/06 0:00	as/srs
Leachate Volume		4980			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		63.1			%			04/27/06 0:00	as/srs
Retained Moisture		8.9			%			04/27/06 0:00	as/srs



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6429 6-8(D)

ACZ Sample ID: **L56113-04**

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	05/02/06 9:44	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:44	jjc
Cadmium (MWMT)	M6010B ICP	0.104		*	mg/L	0.005	0.02	05/03/06 1:44	jjc
Copper (MWMT)	M6010B ICP	18.80		*	mg/L	0.01	0.05	05/03/06 1:44	jjc
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:44	jjc
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:44	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0003	B	*	mg/L	0.0002	0.001	05/02/06 15:51	jjr
Zinc (MWMT)	M6010B ICP	0.68		*	mg/L	0.01	0.05	05/03/06 1:44	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	NDEP - MWMT, Sept. 19, 1990								
Dry Weight		4960			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		30			hrs			04/27/06 0:00	as/srs
Leachate pH		4.8			units			04/27/06 0:00	as/srs
Leachate Volume		5110			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		58.7			%			04/27/06 0:00	as/srs
Retained Moisture		12.9			%			04/27/06 0:00	as/srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W (E)

ACZ Sample ID: L56113-05

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	05/02/06 9:48	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:48	jjc
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/03/06 1:48	jjc
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:48	jjc
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:48	jjc
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:48	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0011		*	mg/L	0.0002	0.001	05/02/06 15:56	jjr
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:48	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5060			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		35.8			hrs			04/27/06 0:00	as/srs
Leachate pH		7			units			04/27/06 0:00	as/srs
Leachate Volume		5250			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		73.7			%			04/27/06 0:00	as/srs
Retained Moisture		5.6			%			04/27/06 0:00	as/srs

# ACZ Laboratories, Inc.

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## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E (F)

ACZ Sample ID: **L56113-06**

Date Sampled: 01/01/06 00:00

Date Received: 04/18/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	05/02/06 9:53	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:52	jjc
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/03/06 1:52	jjc
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:52	jjc
Molybdenum (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	05/03/06 1:52	jjc
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/03/06 1:52	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0008	B	*	mg/L	0.0002	0.001	05/02/06 16:01	jjr
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/03/06 1:52	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5260			g			04/27/06 0:00	as/srs
Extraction pH		5.6			units			04/27/06 0:00	as/srs
Extraction Time		35.8			hrs			04/27/06 0:00	as/srs
Leachate pH		7.3			units			04/27/06 0:00	as/srs
Leachate Volume		5570			mL			04/27/06 0:00	as/srs
Particle Size over 5 cm		53.5			%			04/27/06 0:00	as/srs
Retained Moisture		7.7			%			04/27/06 0:00	as/srs



**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L56113**

Project ID:

**Antimony (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205640</b>													
WG205640ICV	ICV	05/02/06 8:38	MS060215-2	.02008		.02092	mg/L	104.2	90	110			
WG205640ICB	ICB	05/02/06 8:43				.00043	mg/L		-0.0012	0.0012			
WG205152PBS	PBS	05/02/06 9:02				U	mg/L		-0.0024	0.0024			
L56113-01AS	AS	05/02/06 9:11	MS060417-3	.0125	U	.01064	mg/L	85.1	75	125			
L56113-01ASD	ASD	05/02/06 9:16	MS060417-3	.0125	U	.01147	mg/L	91.8	75	125	7.51	20	
L56113-06DUP	DUP	05/02/06 9:58			U	U	mg/L				0	20	RA

**Arsenic (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	4		4.052	mg/L	101.3	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.12	0.12			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.12	0.12			
L56113-01AS	AS	05/03/06 1:18	II060501-2	1	U	1.034	mg/L	103.4	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	1	U	1.042	mg/L	104.2	75	125	0.77	20	
L56113-06DUP	DUP	05/03/06 1:56			U	.00045	mg/L				0	20	RA

**Cadmium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	2		1.9537	mg/L	97.7	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.015	0.015			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.015	0.015			
L56113-01AS	AS	05/03/06 1:18	II060501-2	.5	U	.5006	mg/L	100.1	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	.5	U	.495	mg/L	99	75	125	1.12	20	
L56113-06DUP	DUP	05/03/06 1:56			U	.00024	mg/L				0	20	RA

**Copper (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	2		1.947	mg/L	97.4	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.03	0.03			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.03	0.03			
L56113-01AS	AS	05/03/06 1:18	II060501-2	.5	U	.493	mg/L	98.6	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	.5	U	.489	mg/L	97.8	75	125	0.81	20	
L56113-06DUP	DUP	05/03/06 1:56			U	.0021	mg/L				0	20	RA

**Molybdenum (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	2		1.998	mg/L	99.9	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.03	0.03			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.03	0.03			
L56113-01AS	AS	05/03/06 1:18	II060501-2	.5	.01	.496	mg/L	97.2	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	.5	.01	.485	mg/L	95	75	125	2.24	20	
L56113-06DUP	DUP	05/03/06 1:56			.02	.037	mg/L				59.6	20	RA

# ACZ Laboratories, Inc.

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## Inorganic QC Summary

Lisbon Valley Mining Company, LLC

ACZ Project ID: L56113

Project ID:

### Selenium (MWMT)

### M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	4		4.002	mg/L	100.1	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.12	0.12			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.12	0.12			
L56113-01AS	AS	05/03/06 1:18	II060501-2	1	U	1.034	mg/L	103.4	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	1	U	1.025	mg/L	102.5	75	125	0.87	20	
L56113-06DUP	DUP	05/03/06 1:56			U	.0011	mg/L				0	20	RA

### Uranium (MWMT)

### M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205562</b>													
WG205562ICV	ICV	05/02/06 14:45	MS060215-2	.05		.05092	mg/L	101.8	90	110			
WG205562ICB	ICB	05/02/06 14:50				U	mg/L		-0.0003	0.0003			
WG205152PBS	PBS	05/02/06 15:09				U	mg/L		-0.0006	0.0006			
L56113-01AS	AS	05/02/06 15:18	MS060417-3	.05	.0009	.04938	mg/L	97	75	125			
L56113-01ASD	ASD	05/02/06 15:23	MS060417-3	.05	.0009	.05002	mg/L	98.2	75	125	1.29	20	
L56113-06DUP	DUP	05/02/06 16:05			.0008	.001	mg/L				22.2	20	RA

### Zinc (MWMT)

### M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG205634</b>													
WG205634ICV	ICV	05/03/06 0:45	II060428-1	2		1.933	mg/L	96.7	90	110			
WG205634ICB	ICB	05/03/06 0:49				U	mg/L		-0.03	0.03			
WG205152PBS	PBS	05/03/06 1:06				U	mg/L		-0.03	0.03			
L56113-01AS	AS	05/03/06 1:18	II060501-2	.5	U	.503	mg/L	100.6	75	125			
L56113-01ASD	ASD	05/03/06 1:23	II060501-2	.5	U	.498	mg/L	99.6	75	125	1	20	
L56113-06DUP	DUP	05/03/06 1:56			U	.0022	mg/L				0	20	RA



Lisbon Valley Mining Company, LLC

ACZ Project ID: **L56113**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56113-01	WG205640	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L56113-02	WG205640	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: L56113

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56113-03	WG205640	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L56113-04	WG205640	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: L56113

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56113-05	WG205640	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L56113-06	WG205640	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205562	Uranium (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG205634	Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).



Lisbon Valley Mining Company, LLC

ACZ Project ID: **L56113**

No certification qualifiers associated with this analysis

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L56113

Date Received: 4/18/2006

Received By:

Date Printed: 4/18/2006

### Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?			X
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

### Exceptions: If you answered no to any of the above questions, please describe

N/A

### Contact (For any discrepancies, the client must be contacted)

N/A

### Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
BOX	19.2	15
BOX	22	15
BOX	19.8	16
BOX	20	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

### Notes

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt







Lisbon Valley Mining Company, LLC

ACZ Project ID: L56113

Date Received: 4/18/2006

Received By:

### Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L56113-01	CENT 6420 BED 14(A)									X		
L56113-02	CENT 6420 9-10(B)									X		
L56113-03	CENT 6420 11-13(C)									X		
L56113-04	CENT 6429 6-8(D)									X		
L56113-05	SENT W (E)									X		
L56113-06	SENT E (F)									X		

### Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

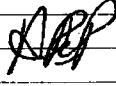
\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

Lisbon Valley Mining Co.						Chain of Custody Record								
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950						Send report with laboratory QA to:  920 S County Rd 313 La Sal, Utah 84530								
Lisbon Valley Copper Project			ANALYSES									ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590		
SAMPLE NUMBER	DATE	TIME	MVMP								Number of Containers	Remarks / Comments		
Cent 6420 14 (A)	Jan 06		x								1	Composite w/Feb&Mar samples per suffix (A-G)		
<del>Cent 6420 14 (B)</del>	Jan 06		x								1	As Above		
Cent 6420 11-13 (C)	Jan 06		x								1	As Above		
<del>Cent 6420 16-8 (D)</del>	Jan 06		x								1	As Above		
Sent W 6440 14 (E)	Jan 06		x								1	As Above		
Sent W 6460 14 (E)	Jan 06		x								1	As Above		
<del>Sent E 6460 44 (F)</del>	Jan 06		x								1	As Above		
Sampled By:			Total Number of Containers											
Charles Bauer														
Sampler's Signature			Contact Person:											
			Lantz M Indergard											
			Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223											
Relinquished By:		Date / Time:	Received By:							Date / Time:				
Lantz Indergard										4/18/06				
Method of Shipment:														
UPS														





Lisbon Valley Mining Co.				Chain of Custody Record			
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to:  920 S County Rd 313 La Sal, Utah 84530			
Lisbon Valley Copper Project			ANALYSES				
SAMPLE NUMBER	DATE	TIME	MWMP				Number of Containers
ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590							
<u>Remarks / Comments</u>							
Sent W 6420 Bed 14 (E)	Mar 06		x				1
Cent 6420 11-13 (C)	Mar 06		x				1
Sent East Bed 14 (F)	Mar 06		x				1
Cent 6420 Bed 14 (A)	Mar 06		x				1
Sent E Bed 13 6420 (G)	Mar 06		x				1
<del>Cent 6420 Bed 14 (F)</del>	Mar 06		x				1
6420 Sent East Bed 13 (G)	Mar 06		x				1
Cent 6420 Bed 13 (D)	Mar 06		x				1
Sampled By: Charles Bauer			Total Number of Containers				
Sampler's Signature			Contact Person: Lantz M Indergard				
			Phone: (435) 686-9950 ext. 226    Fax: (435) 686-2223				
Relinquished By:		Date / Time:	Received By:		Date / Time:		
Lantz Indergard					4/12/00		
Method of Shipment: UPS							

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Analytical Report

August 09, 2006

**Report to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Bill to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Project ID:**

ACZ Project ID: L57662

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 13, 2006. This project has been assigned to ACZ's project number, L57662. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L57662. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 09, 2006. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

09/Aug/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



Lisbon Valley Mining Company, LLC

August 09, 2006

Project ID:

ACZ Project ID: L57662

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 8 soil samples from Lisbon Valley Mining Company, LLC on July 13, 2006. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L57662. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times.

**Sample Analysis**

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomaly required further explanation not provided by the Extended Qualifier Report:

1. For Zinc values flagged with an "B1", Zinc was detected in the PBS at 0.048 mg/L. The results may be biased slightly high.



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W 14 6380-6400

ACZ Sample ID: **L57662-01**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 21:58	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:26	jjc
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 4:26	jjc
Copper (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 4:26	jjc
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 4:26	jjc
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:26	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0026			mg/L	0.0002	0.001	07/27/06 21:58	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/08/06 4:26	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5190			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		29			hrs			07/21/06 0:00	srs
Leachate pH		7.1			units			07/21/06 0:00	srs
Leachate Volume		4860			mL			07/21/06 0:00	srs
Particle Size over 5 cm		53.1			%			07/21/06 0:00	srs
Retained Moisture		8.8			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E9-10 6380-6400

ACZ Sample ID: **L57662-02**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 22:19	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:42	jjc
Cadmium (MWMT)	M6010B ICP	0.028			mg/L	0.005	0.02	08/08/06 4:42	jjc
Copper (MWMT)	M6010B ICP	0.10			mg/L	0.01	0.05	08/08/06 4:42	jjc
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 4:42	jjc
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:42	jjc
Uranium (MWMT)	M6020 ICP-MS	0.0021			mg/L	0.0002	0.001	07/27/06 22:19	scp
Zinc (MWMT)	M6010B ICP	2.03		*	mg/L	0.01	0.05	08/08/06 4:42	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5040			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		33			hrs			07/21/06 0:00	srs
Leachate pH		3.7			units			07/21/06 0:00	srs
Leachate Volume		4780			mL			07/21/06 0:00	srs
Particle Size over 5 cm		46.8			%			07/21/06 0:00	srs
Retained Moisture		14.9			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 14 6420

ACZ Sample ID: L57662-03

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 22:32	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:46	jic
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 4:46	jic
Copper (MWMT)	M6010B ICP	0.01	B		mg/L	0.01	0.05	08/08/06 4:46	jic
Molybdenum (MWMT)	M6010B ICP	0.03	B		mg/L	0.01	0.05	08/08/06 4:46	jic
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:46	jic
Uranium (MWMT)	M6020 ICP-MS	0.0003	B		mg/L	0.0002	0.001	07/27/06 22:32	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/08/06 4:46	jic

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		1980			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		23			hrs			07/21/06 0:00	srs
Leachate pH		7.2			units			07/21/06 0:00	srs
Leachate Volume		2130			mL			07/21/06 0:00	srs
Particle Size over 5 cm		53.7			%			07/21/06 0:00	srs
Retained Moisture		9.1			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E 6-8 6380-6420

ACZ Sample ID: **L57662-04**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 22:39	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 4:59	jic
Cadmium (MWMT)	M6010B ICP	0.014	B		mg/L	0.005	0.02	08/08/06 4:59	jic
Copper (MWMT)	M6010B ICP	12.50			mg/L	0.01	0.05	08/08/06 4:59	jic
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 4:59	jic
Selenium (MWMT)	M6010B ICP	0.05	B		mg/L	0.04	0.2	08/08/06 4:59	jic
Uranium (MWMT)	M6020 ICP-MS	0.0011			mg/L	0.0002	0.001	07/27/06 22:39	scp
Zinc (MWMT)	M6010B ICP	0.77		*	mg/L	0.01	0.05	08/08/06 4:59	jic

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		3940			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		26			hrs			07/21/06 0:00	srs
Leachate pH		4.6			units			07/21/06 0:00	srs
Leachate Volume		3860			mL			07/21/06 0:00	srs
Particle Size over 5 cm		34.3			%			07/21/06 0:00	srs
Retained Moisture		20.8			%			07/21/06 0:00	srs



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E11-13 6380-640

ACZ Sample ID: **L57662-05**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 22:59	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:03	jic
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 5:03	jic
Copper (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:03	jic
Molybdenum (MWMT)	M6010B ICP	0.02	B		mg/L	0.01	0.05	08/08/06 5:03	jic
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:03	jic
Uranium (MWMT)	M6020 ICP-MS		U		mg/L	0.0002	0.001	07/27/06 22:59	scp
Zinc (MWMT)	M6010B ICP	0.09		*	mg/L	0.01	0.05	08/08/06 5:03	jic

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5220			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		33			hrs			07/21/06 0:00	srs
Leachate pH		7.2			units			07/21/06 0:00	srs
Leachate Volume		5150			mL			07/21/06 0:00	srs
Particle Size over 5 cm		44.3			%			07/21/06 0:00	srs
Retained Moisture		9.4			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 9-10 6420

ACZ Sample ID: **L57662-06**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 23:06	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:07	jic
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 5:07	jic
Copper (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:07	jic
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:07	jic
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:07	jic
Uranium (MWMT)	M6020 ICP-MS	0.0004	B		mg/L	0.0002	0.001	07/27/06 23:06	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/08/06 5:07	jic

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2060			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		33			hrs			07/21/06 0:00	srs
Leachate pH		7.9			units			07/21/06 0:00	srs
Leachate Volume		1910			mL			07/21/06 0:00	srs
Particle Size over 5 cm		51.4			%			07/21/06 0:00	srs
Retained Moisture		7.3			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E 14 6380-6400

ACZ Sample ID: **L57662-07**

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0008	0.004	07/27/06 23:13	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:11	jic
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 5:11	jic
Copper (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:11	jic
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:11	jic
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:11	jic
Uranium (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0002	0.001	07/27/06 23:13	scp
Zinc (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	08/08/06 5:11	jic

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	NDEP - MWMT, Sept. 19, 1990								
Dry Weight		5160			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		30			hrs			07/21/06 0:00	srs
Leachate pH		7.4			units			07/21/06 0:00	srs
Leachate Volume		4840			mL			07/21/06 0:00	srs
Particle Size over 5 cm		73.1			%			07/21/06 0:00	srs
Retained Moisture		4.8			%			07/21/06 0:00	srs

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 11-13 6420

ACZ Sample ID: L57662-08

Date Sampled: 05/01/06 00:00

Date Received: 07/13/06

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0008	0.004	07/27/06 23:20	scp
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:15	jjc
Cadmium (MWMT)	M6010B ICP		U		mg/L	0.005	0.02	08/08/06 5:15	jjc
Copper (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:15	jjc
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	08/08/06 5:15	jjc
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	08/08/06 5:15	jjc
Uranium (MWMT)	M6020 ICP-MS		U		mg/L	0.0002	0.001	07/27/06 23:20	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/08/06 5:15	jjc

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2110			g			07/21/06 0:00	srs
Extraction pH		7.3			units			07/21/06 0:00	srs
Extraction Time		29			hrs			07/21/06 0:00	srs
Leachate pH		7.3			units			07/21/06 0:00	srs
Leachate Volume		1960			mL			07/21/06 0:00	srs
Particle Size over 5 cm		63.4			%			07/21/06 0:00	srs
Retained Moisture		12.5			%			07/21/06 0:00	srs



**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: L57662

Project ID:

**Antimony (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210165</b>													
WG210165ICV	ICV	07/27/06 21:17	MS060621-1	.02008		.02011	mg/L	100.1	90	110			
WG210165ICB	ICB	07/27/06 21:24				U	mg/L		-0.0012	0.0012			
WG209856PBS	PBS	07/27/06 21:51				U	mg/L		-0.0024	0.0024			
L57662-01AS	AS	07/27/06 22:05	MS060606-3	.0125	U	.01227	mg/L	98.2	75	125			
L57662-01ASD	ASD	07/27/06 22:12	MS060606-3	.0125	U	.01232	mg/L	98.6	75	125	0.41	20	

**Arsenic (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	4		4.156	mg/L	103.9	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.12	0.12			
WG209856PBS	PBS	08/08/06 4:22				U	mg/L		-0.12	0.12			
L57662-01AS	AS	08/08/06 4:34	II060731-7	1	U	.954	mg/L	95.4	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	1	U	.959	mg/L	95.9	75	125	0.52	20	

**Cadmium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	2		1.942	mg/L	97.1	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.015	0.015			
WG209856PBS	PBS	08/08/06 4:22				U	mg/L		-0.015	0.015			
L57662-01AS	AS	08/08/06 4:34	II060731-7	.5	U	.4751	mg/L	95	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	.5	U	.4854	mg/L	97.1	75	125	2.14	20	

**Copper (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	2		1.931	mg/L	96.6	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.03	0.03			
WG209856PBS	PBS	08/08/06 4:22				U	mg/L		-0.03	0.03			
L57662-01AS	AS	08/08/06 4:34	II060731-7	.5	U	.485	mg/L	97	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	.5	U	.48	mg/L	96	75	125	1.04	20	

**Molybdenum (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	2		1.993	mg/L	99.7	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.03	0.03			
WG209856PBS	PBS	08/08/06 4:22				U	mg/L		-0.03	0.03			
L57662-01AS	AS	08/08/06 4:34	II060731-7	.5	U	.383	mg/L	76.6	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	.5	U	.401	mg/L	80.2	75	125	4.59	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: L57662

Project ID:

**Selenium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	4		4.015	mg/L	100.4	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.12	0.12			
WG209856PBS	PBS	08/08/06 4:22				U	mg/L		-0.12	0.12			
L57662-01AS	AS	08/08/06 4:34	II060731-7	1	U	.89	mg/L	89	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	1	U	.915	mg/L	91.5	75	125	2.77	20	

**Uranium (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210165</b>													
WG210165ICV	ICV	07/27/06 21:17	MS060621-1	.05		.05506	mg/L	110.1	90	110			
WG210165ICB	ICB	07/27/06 21:24				U	mg/L		-0.0003	0.0003			
WG209856PBS	PBS	07/27/06 21:51				U	mg/L		-0.0006	0.0006			
L57662-01AS	AS	07/27/06 22:05	MS060606-3	.05	.0026	.04908	mg/L	93	75	125			
L57662-01ASD	ASD	07/27/06 22:12	MS060606-3	.05	.0026	.04918	mg/L	93.2	75	125	0.2	20	

**Zinc (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG210706</b>													
WG210706ICV	ICV	08/08/06 4:02	II060731-3	2		1.958	mg/L	97.9	90	110			
WG210706ICB	ICB	08/08/06 4:06				U	mg/L		-0.03	0.03			
WG209856PBS	PBS	08/08/06 4:22				.048	mg/L		-0.03	0.03			B1
L57662-01AS	AS	08/08/06 4:34	II060731-7	.5	U	.495	mg/L	99	75	125			
L57662-01ASD	ASD	08/08/06 4:38	II060731-7	.5	U	.523	mg/L	104.6	75	125	5.5	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L57662**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57662-01	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-02	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-03	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-04	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-05	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-06	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-07	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.
L57662-08	WG210706	Zinc (MWMt)	M6010B ICP	B1	Target analyte detected in prep / method blank at or above the method reporting limit. See Case Narrative.

Lisbon Valley Mining Company, LLC

ACZ Project ID: L57662

### Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Antimony (MVMET)

M6020 ICP-MS

Uranium (MVMET)

M6020 ICP-MS



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L57662

Date Received: 7/13/2006

Received By:

Date Printed: 7/13/2006

### Receipt Verification

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA
		X
		X
		X
X		
X		
X		
X		
X		
X		
		X
		X
		X
		X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

### Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1197	23.4	20

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

### Notes

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L57662

Date Received: 7/13/2006

Received By:

### Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L57662-01	SENT W 14 6380-6400									X		
L57662-02	SENT E9-10 6380-6400									X		
L57662-03	CENT BED 14 6420									X		
L57662-04	SENT E BEDS 6-8 6380									X		
L57662-05	SENT E11-13 6380-640									X		
L57662-06	CENT BED 9-10 6420									X		
L57662-07	SENT E 14 6380-6400									X		
L57662-08	CENT BED 11-13 6420									X		
L57662-09	CENT BED 6-8 6420									X		

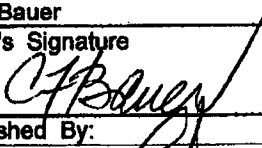
### Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

L57662

Lisbon Valley Mining Co.				Chain of Custody Record							
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to:  920 S County Rd 313 La Sal, Utah 84530							
Lisbon Valley Copper Project			ANALYSES						ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590		
SAMPLE NUMBER	DATE	TIME	MWMP								Number of Containers
Sent W 6380 Bed 14 (A)	May 06		x							1	Composite w/April&June samples per suffix (ie. A-G)
Sent East Bed 9-10 6380 (B)	May 06		x							1	As Above
Cent Bed 14 6420 (E)	May 06		x							1	As Above
Sent E Beds 6-8 6380 (F)	May 06		x							1	As Above
Sent E Beds 11-13 6380 ©	May 06		x							1	As Above
Cent Bed 9-10 6420 (G)	May 06		x							1	As Above
Sent E Bed 14 6380 (D)	May 06		x							1	As Above
Cent Bed 11-13 6420 (H)	May 06		x							1	As Above
Cent Bed 6-8 6420 (F)	May 06		x							1	As Above
Sampled By: Charles Bauer			Total Number of Containers								
Sampler's Signature 			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223								
Relinquished By: Lantz Indergard			Date / Time: 7-11-06			Received By:			Date / Time:		
Method of Shipment: UPS											



December 21, 2006

**Report to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Bill to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Project ID: COPPER PROJECT****ACZ Project ID: L60119****Lantz Indergard:**

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 27, 2006. This project has been assigned to ACZ's project number, L60119. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L60119. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 21, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

21/Dec/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.





Lisbon Valley Mining Company, LLC

December 21, 2006

Project ID: COPPER PROJECT

ACZ Project ID: L60119

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 12 soil samples from Lisbon Valley Mining Company, LLC on November 27, 2006. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L60119. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were not performed within EPA recommended holding times.

The hold time for metal's analysis is 6 months. The date used for the samples was the date of the initial samples that were to be compiled with samples taken at later dates. Not all of the sample dates can be entered.

**Sample Analysis**

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

Sample L60119-12 (Sent East Bed 2) was not analyzed due to insufficient sample volume.

**Lisbon Valley Mining Company, LLC**

Project ID: COPPER PROJECT

Sample ID: SENT W 6380 BED 14 A

ACZ Sample ID: **L60119-01**

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0009	BH	*	mg/L	0.0004	0.002	12/19/06 3:02	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:11	gme
Cadmium (MWMT)	M6010B ICP		UH	*	mg/L	0.005	0.02	12/20/06 3:11	gme
Copper (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:11	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:11	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:11	gme
Uranium (MWMT)	M6020 ICP-MS	0.0007	H	*	mg/L	0.0001	0.0005	12/19/06 3:02	jjr
Zinc (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:11	gme

## Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	NDEP - MWMT, Sept. 19, 1990								
Dry Weight		4980			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		29			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.7			units			12/12/06 0:00	srs/lwt
Leachate Volume		4910			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		64			%			12/12/06 0:00	srs/lwt
Retained Moisture		10.2			%			12/12/06 0:00	srs/lwt

**Lisbon Valley Mining Company, LLC**

Project ID: COPPER PROJECT

Sample ID: SENT E 6340 B 3-5 B

ACZ Sample ID: **L60119-02**

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:16	jjr
Arsenic (MWMt)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:27	gme
Cadmium (MWMt)	M6010B ICP	0.008	BH	*	mg/L	0.005	0.02	12/20/06 3:27	gme
Copper (MWMt)	M6010B ICP	0.23	H	*	mg/L	0.01	0.05	12/20/06 3:27	gme
Molybdenum (MWMt)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:27	gme
Selenium (MWMt)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:27	gme
Uranium (MWMt)	M6020 ICP-MS	0.0028	H	*	mg/L	0.0001	0.0005	12/19/06 3:16	jjr
Zinc (MWMt)	M6010B ICP	0.04	BH	*	mg/L	0.01	0.05	12/20/06 3:27	gme

## Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4980			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		30			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.56			units			12/12/06 0:00	srs/lwt
Leachate Volume		4910			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		78			%			12/12/06 0:00	srs/lwt
Retained Moisture		13.8			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT  
Sample ID: SENT E 6340 B 11-13C

ACZ Sample ID: **L60119-03**  
Date Sampled: 06/01/06 00:00  
Date Received: 11/27/06  
Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:25	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:31	gme
Cadmium (MWMT)	M6010B ICP		UH	*	mg/L	0.005	0.02	12/20/06 3:31	gme
Copper (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:31	gme
Molybdenum (MWMT)	M6010B ICP	0.06	H	*	mg/L	0.01	0.05	12/20/06 3:31	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:31	gme
Uranium (MWMT)	M6020 ICP-MS	0.0003	BH	*	mg/L	0.0001	0.0005	12/19/06 3:25	jjr
Zinc (MWMT)	M6010B ICP	0.02	BH	*	mg/L	0.01	0.05	12/20/06 3:31	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4980			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		31			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.88			units			12/12/06 0:00	srs/lwt
Leachate Volume		4790			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		77			%			12/12/06 0:00	srs/lwt
Retained Moisture		13.5			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT

Sample ID: SENT E 6340 BED 14 D

ACZ Sample ID: **L60119-04**

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:39	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:43	gme
Cadmium (MWMT)	M6010B ICP		UH	*	mg/L	0.005	0.02	12/20/06 3:43	gme
Copper (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:43	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:43	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:43	gme
Uranium (MWMT)	M6020 ICP-MS	0.0012	H	*	mg/L	0.0001	0.0005	12/19/06 3:39	jjr
Zinc (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:43	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4990			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		31			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.71			units			12/12/06 0:00	srs/lwt
Leachate Volume		5020			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		64			%			12/12/06 0:00	srs/lwt
Retained Moisture		11.6			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT  
Sample ID: SENT E 6340 B 9-10 E

ACZ Sample ID: L60119-05  
Date Sampled: 06/01/06 00:00  
Date Received: 11/27/06  
Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:44	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:47	gme
Cadmium (MWMT)	M6010B ICP	0.008	BH	*	mg/L	0.005	0.02	12/20/06 3:47	gme
Copper (MWMT)	M6010B ICP	0.11	H	*	mg/L	0.01	0.05	12/20/06 3:47	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:47	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:47	gme
Uranium (MWMT)	M6020 ICP-MS	0.0018	H	*	mg/L	0.0001	0.0005	12/19/06 3:44	jjr
Zinc (MWMT)	M6010B ICP	1.13	H	*	mg/L	0.01	0.05	12/20/06 3:47	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		36.5			hrs			12/12/06 0:00	srs/lwt
Leachate pH		4.85			units			12/12/06 0:00	srs/lwt
Leachate Volume		4920			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		71			%			12/12/06 0:00	srs/lwt
Retained Moisture		21.2			%			12/12/06 0:00	srs/lwt



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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT

Sample ID: SENT E 6340 B 6-8 F

ACZ Sample ID: L60119-06

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:48	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:51	gme
Cadmium (MWMT)	M6010B ICP	0.026	H	*	mg/L	0.005	0.02	12/20/06 3:51	gme
Copper (MWMT)	M6010B ICP	0.07	H	*	mg/L	0.01	0.05	12/20/06 3:51	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:51	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:51	gme
Uranium (MWMT)	M6020 ICP-MS	0.0482	H	*	mg/L	0.0001	0.0005	12/19/06 3:48	jjr
Zinc (MWMT)	M6010B ICP	3.95	H	*	mg/L	0.01	0.05	12/20/06 3:51	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		3970			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		27			hrs			12/12/06 0:00	srs/lwt
Leachate pH		3.44			units			12/12/06 0:00	srs/lwt
Leachate Volume		3970			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		52			%			12/12/06 0:00	srs/lwt
Retained Moisture		17.6			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT  
Sample ID: CENT 6400 BED 6-8 G

ACZ Sample ID: **L60119-07**  
Date Sampled: 06/01/06 00:00  
Date Received: 11/27/06  
Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:53	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:55	gme
Cadmium (MWMT)	M6010B ICP	4.670	H	*	mg/L	0.005	0.02	12/20/06 3:55	gme
Copper (MWMT)	M6010B ICP	9.47	H	*	mg/L	0.01	0.05	12/20/06 3:55	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:55	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:55	gme
Uranium (MWMT)	M6020 ICP-MS	0.0400	H	*	mg/L	0.0001	0.0005	12/19/06 3:53	jjr
Zinc (MWMT)	M6010B ICP	10.90	H	*	mg/L	0.01	0.05	12/20/06 3:55	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4940			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		31.8			hrs			12/12/06 0:00	srs/lwt
Leachate pH		3.47			units			12/12/06 0:00	srs/lwt
Leachate Volume		4980			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		75			%			12/12/06 0:00	srs/lwt
Retained Moisture		19.9			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC  
Project ID: COPPER PROJECT  
Sample ID: CENT 6400 BED 14 H

ACZ Sample ID: **L60119-08**  
Date Sampled: 06/01/06 00:00  
Date Received: 11/27/06  
Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 3:57	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:59	gme
Cadmium (MWMT)	M6010B ICP		UH	*	mg/L	0.005	0.02	12/20/06 3:59	gme
Copper (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:59	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:59	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 3:59	gme
Uranium (MWMT)	M6020 ICP-MS	0.0007	H	*	mg/L	0.0001	0.0005	12/19/06 3:57	jjr
Zinc (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 3:59	gme

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5010			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		36.5			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.73			units			12/12/06 0:00	srs/lwt
Leachate Volume		4850			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		76			%			12/12/06 0:00	srs/lwt
Retained Moisture		13.8			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT

Sample ID: CENT 6400 B 11-13 I

ACZ Sample ID: L60119-09

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 4:02	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:03	gme
Cadmium (MWMT)	M6010B ICP	0.006	BH	*	mg/L	0.005	0.02	12/20/06 4:03	gme
Copper (MWMT)	M6010B ICP	0.01	BH	*	mg/L	0.01	0.05	12/20/06 4:03	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 4:03	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:03	gme
Uranium (MWMT)	M6020 ICP-MS	0.0016	H	*	mg/L	0.0001	0.0005	12/19/06 4:02	jjr
Zinc (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 4:03	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5020			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		29			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.95			units			12/12/06 0:00	srs/lwt
Leachate Volume		5010			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		60			%			12/12/06 0:00	srs/lwt
Retained Moisture		12.2			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT

Sample ID: CENT 6400 B 9-10 J

ACZ Sample ID: **L60119-10**

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 4:06	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:07	gme
Cadmium (MWMT)	M6010B ICP	2.110	H	*	mg/L	0.005	0.02	12/20/06 4:07	gme
Copper (MWMT)	M6010B ICP	3.08	H	*	mg/L	0.01	0.05	12/20/06 4:07	gme
Molybdenum (MWMT)	M6010B ICP	0.01	BH	*	mg/L	0.01	0.05	12/20/06 4:07	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:07	gme
Uranium (MWMT)	M6020 ICP-MS	0.0013	H	*	mg/L	0.0001	0.0005	12/19/06 4:06	jjr
Zinc (MWMT)	M6010B ICP	1.62	H	*	mg/L	0.01	0.05	12/20/06 4:07	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5060			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		31			hrs			12/12/06 0:00	srs/lwt
Leachate pH		4.42			units			12/12/06 0:00	srs/lwt
Leachate Volume		4910			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		57			%			12/12/06 0:00	srs/lwt
Retained Moisture		16.1			%			12/12/06 0:00	srs/lwt

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## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID: COPPER PROJECT

Sample ID: CENT 6400 B 3-5 K

ACZ Sample ID: **L60119-11**

Date Sampled: 06/01/06 00:00

Date Received: 11/27/06

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0004	0.002	12/19/06 4:11	jjr
Arsenic (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:11	gme
Cadmium (MWMT)	M6010B ICP	0.095	H	*	mg/L	0.005	0.02	12/20/06 4:11	gme
Copper (MWMT)	M6010B ICP	0.10	H	*	mg/L	0.01	0.05	12/20/06 4:11	gme
Molybdenum (MWMT)	M6010B ICP		UH	*	mg/L	0.01	0.05	12/20/06 4:11	gme
Selenium (MWMT)	M6010B ICP		UH	*	mg/L	0.04	0.2	12/20/06 4:11	gme
Uranium (MWMT)	M6020 ICP-MS		UH	*	mg/L	0.0001	0.0005	12/19/06 4:11	jjr
Zinc (MWMT)	M6010B ICP	0.11	H	*	mg/L	0.01	0.05	12/20/06 4:11	gme

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4000			g			12/12/06 0:00	srs/lwt
Extraction pH		6.46			units			12/12/06 0:00	srs/lwt
Extraction Time		27			hrs			12/12/06 0:00	srs/lwt
Leachate pH		6.21			units			12/12/06 0:00	srs/lwt
Leachate Volume		4090			mL			12/12/06 0:00	srs/lwt
Particle Size over 5 cm		53			%			12/12/06 0:00	srs/lwt
Retained Moisture		11.4			%			12/12/06 0:00	srs/lwt



**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60119**

Project ID: COPPER PROJECT

**Antimony (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218322</b>													
WG218322ICV	ICV	12/19/06 2:34	MS061106-2	.02008		.01891	mg/L	94.2	90	110			
WG218322ICB	ICB	12/19/06 2:39				.00045	mg/L		-0.0012	0.0012			
WG218017PBS	PBS	12/19/06 2:58				U	mg/L		-0.0012	0.0012			
L60119-01AS	AS	12/19/06 3:07	MS061218-3	.00625	.0009	.00505	mg/L	66.4	75	125			M2
L60119-01ASD	ASD	12/19/06 3:11	MS061218-3	.00625	.0009	.00514	mg/L	67.8	75	125	1.77	20	M2

**Arsenic (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	4		3.975	mg/L	99.4	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.12	0.12			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.12	0.12			
L60119-01AS	AS	12/20/06 3:19	II061219-2	1	U	1.204	mg/L	120.4	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	1	U	1.196	mg/L	119.6	75	125	0.67	20	

**Cadmium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	2		1.9127	mg/L	95.6	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.015	0.015			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.015	0.015			
L60119-01AS	AS	12/20/06 3:19	II061219-2	.5	U	.5918	mg/L	118.4	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	.5	U	.5779	mg/L	115.6	75	125	2.38	20	

**Copper (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	2		1.949	mg/L	97.5	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.03	0.03			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.03	0.03			
L60119-01AS	AS	12/20/06 3:19	II061219-2	.5	U	.608	mg/L	121.6	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	.5	U	.585	mg/L	117	75	125	3.86	20	

**Molybdenum (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	2		1.988	mg/L	99.4	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.03	0.03			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.03	0.03			
L60119-01AS	AS	12/20/06 3:19	II061219-2	.5	U	.593	mg/L	118.6	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	.5	U	.568	mg/L	113.6	75	125	4.31	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60119**Project ID: **COPPER PROJECT****Selenium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	4		3.993	mg/L	99.8	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.12	0.12			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.12	0.12			
L60119-01AS	AS	12/20/06 3:19	II061219-2	1	U	1.137	mg/L	113.7	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	1	U	1.057	mg/L	105.7	75	125	7.29	20	

**Uranium (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218322</b>													
WG218322ICV	ICV	12/19/06 2:34	MS061106-2	.05		.05292	mg/L	105.8	90	110			
WG218322ICB	ICB	12/19/06 2:39				U	mg/L		-0.0003	0.0003			
WG218017PBS	PBS	12/19/06 2:58				U	mg/L		-0.0003	0.0003			
L60119-01AS	AS	12/19/06 3:07	MS061218-3	.025	.0007	.02455	mg/L	95.4	75	125			
L60119-01ASD	ASD	12/19/06 3:11	MS061218-3	.025	.0007	.02479	mg/L	96.4	75	125	0.97	20	

**Zinc (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG218314</b>													
WG218314ICV	ICV	12/20/06 2:48	II061209-1	2		1.967	mg/L	98.4	90	110			
WG218314ICB	ICB	12/20/06 2:52				U	mg/L		-0.03	0.03			
WG218017PBS	PBS	12/20/06 3:07				U	mg/L		-0.03	0.03			
L60119-01AS	AS	12/20/06 3:19	II061219-2	.5	U	.619	mg/L	123.8	75	125			
L60119-01ASD	ASD	12/20/06 3:23	II061219-2	.5	U	.559	mg/L	111.8	75	125	10.19	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60119**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L60119-01	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-02	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-03	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-04	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-05	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-06	WG218322	Antimony (MWMVT)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMVT)	M6010B ICP	H1	Sample analysis performed past holding time.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60119**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L60119-07	WG218322	Antimony (MWMt)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-08	WG218322	Antimony (MWMt)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-09	WG218322	Antimony (MWMt)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-10	WG218322	Antimony (MWMt)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
L60119-11	WG218322	Antimony (MWMt)	M6020 ICP-MS	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
	WG218314	Arsenic (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Cadmium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Copper (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Molybdenum (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Selenium (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.
		Zinc (MWMt)	M6010B ICP	H1	Sample analysis performed past holding time.

**Lisbon Valley Mining Company, LLC**

ACZ Project ID: **L60119**

**Metals Analysis**

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MMVT)

M6020 ICP-MS

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC  
COPPER PROJECT

ACZ Project ID: L60119  
Date Received: 11/27/2006  
Received By:  
Date Printed: 11/27/2006

### Receipt Verification

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

YES	NO	NA
		X
		X
		X
X		
X		
X		
X		
X		
X		
		X
		X
		X
		X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

### Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1309	14.2	18
1341	15.1	17
1694	14.8	19
536	23.9	17

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

### Notes



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC  
COPPER PROJECT

ACZ Project ID: L60119  
Date Received: 11/27/2006  
Received By:

### Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L60119-01	SENT W 6380 BED 14 A									X		
L60119-02	SENT E 6340 B 3-5 B									X		
L60119-03	SENT E 6340 B 11-13C									X		
L60119-04	SENT E 6340 BED 14 D									X		
L60119-05	SENT E 6340 B 9-10 E									X		
L60119-06	SENT E 6340 B 6-8 F									X		
L60119-07	CENT 6400 BED 6-8 G									X		
L60119-08	CENT 6400 BED 14 H									X		
L60119-09	CENT 6400 B 11-13 I									X		
L60119-10	CENT 6400 B 9-10 J									X		
L60119-11	CENT 6400 B 3-5 K									X		
L60119-12	SENT EAST BED 2									X		

### Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

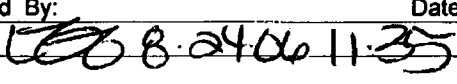
\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

~~L59387~~ 36.10.12.06

L60119: Page 22 of 25

L60119

<b>Lisbon Valley Mining Co.</b>				<b>Chain of Custody Record</b>					
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to:  920 S County Rd 313 La Sal, Utah 84530					
Lisbon Valley Copper Project			ANALYSES					ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590	
SAMPLE NUMBER	DATE	TIME	MWMP						Number of Containers
12. Sent East Bed 2	June 06		x					1	Composite w/April&May samplesamples per suffix (ie. A-G)
2. Sent East Bed 3-5 (B)	June 06		x					1	As Above
6. Sent E Beds 6-8 6360 (F)	June 06		x					1	As Above
3. Sent E Beds 11-13 6360 ©	June 06		x					1	As Above
4. Sent E Bed 14 6360 (D)	June 06		x					1	As Above
5. Sent E 6360 Beds 9-10 (E)	June 06		x					1	As Above
8. Cent Bed 14 6420 (H)	June 06		x					1	As Above
10. Cent 6420 Bed 9-10 (J)	June 06		x					1	As Above
9. Cent 6420 Bed 11-13 (I)	June 06		x					1	As Above
1. Sent W 6380 Bed 14 (A)	June 06		x					1	As Above
Sampled By: Charles Bauer			Total Number of Containers						
Sampler's Signature			Contact Person: Lantz M Indergard						
			Phone: (435) 686-9950 ext. 226    Fax: (435) 686-2223						
Relinquished By:		Date / Time:	Received By:		Date / Time:				
Lantz Indergard									
Method of Shipment: UPS									

L60119

**Lisbon Valley Mining Co.**

P.O. Box 248  
920 S. County Rd. 313  
La Sal, Utah 84530  
Phone: (435) 686-9950

**Chain of Custody Record**

Send report with laboratory QA to:

920 S County Rd 313  
La Sal, Utah 84530

Lisbon Valley Copper Project

**ANALYSES**

ACZ Laboratories, Inc.  
2773 Downhill Drive  
Steamboat Springs, CO  
(970) 879-6590

**SAMPLE NUMBER****DATE****TIME**

MWMP

Number of  
ContainersRemarks / Comments

9. Cent 6400 Beds 11-13 (I)

Sept 06

x

1

Composite w/July & August samples  
per suffix (ie. A-K)

7. Cent 6400 Beds 6-8 (G)

Sept 06

x

1

As Above

11. Cent 6400 Bed 3-5 (K)

Sept 06

x

1

As Above

10. Cent 6400 Beds 9-10 (J)

Sept 06

x

1

As Above

4. Sent East 6300 Bed 14 (D)

Sept 06

x

1

As Above

1. Sentinel West 6360 Bed 14 (A)

Sept 06

x

1

As Above

8. Cent 6400 Bed 14 (H)

Sept 06

x

1

As Above

Sampled By:  
Charles Bauer

Total Number of  
Containers

71

Sampler's Signature

Contact Person:

Lantz M Indergard

Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223

Relinquished By:

Date / Time:

Received By:

Date / Time:

Lantz Indergard

11-15-06

9:57 AM

L60119 11-17-06 13:24

Method of Shipment:  
UPS

Comments:

These samples are to be composited with July & August 06  
samples.

L60119

<b>Lisbon Valley Mining Co.</b> P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				<b>Chain of Custody Record</b> Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530				
Lisbon Valley Copper Project			ANALYSES			Number of Containers	ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590	
SAMPLE NUMBER	DATE	TIME	MWMP					
5. Sent East 6320 Beds 9-10 (E)	Aug 06		x					1 Composite w/July&September samples per suffix (ie. A-K)
3. Sent East 6320 Beds 11-13 @	Aug 06		x					1 As Above
4. Sent East 6320 Bed 14 (D)	Aug 06		x					1 As Above
1. Sentinel West 6360 Bed 14 (A)	Aug 06		x					1 As Above
10. Cent 6400 Beds 9-10 (J)	Aug 06		x					1 As Above
7. Cent 6400 Beds 6-8 (G)	Aug 06		x					1 As Above
9. Cent 6400 Beds 11-13 (I)	Aug 06		x					1 As Above
8. Cent 6400 Bed 14 (H)	Aug 06		x					1 As Above
11. Cent 6400 Beds 3-5 (K)	Aug 06		x					1 As Above
Sampled By: Charles Bauer			Total Number of Containers				9	
Sampler's Signature <i>Charles Bauer</i>			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223					
Relinquished By: Lantz Indergard		Date / Time: <i>11-15-06 8:12 A.M.</i>		Received By: <i>LBI</i>		Date / Time: <i>11-17-06 13:23</i>		
Method of Shipment: UPS			Comments: These samples are to be composited with July and September 06 samples.					

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Analytical Report

February 15, 2007

**Report to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Bill to:**

Lantz Indergard  
Lisbon Valley Mining Company, LLC  
P.O. Box 248  
La Sal, UT 84530

**Project ID:**

ACZ Project ID: L60753

**Lantz Indergard:**

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on January 17, 2007. This project has been assigned to ACZ's project number, L60753. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L60753. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after March 15, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

15/Feb/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 11-13(A)

ACZ Sample ID: L60753-01

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS	0.0005	B		mg/L	0.0004	0.002	02/08/07 21:12	jir
Arsenic (MWMt)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:00	msh
Cadmium (MWMt)	M6010B ICP		U	*	mg/L	0.005	0.02	02/14/07 4:00	msh
Copper (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:00	msh
Molybdenum (MWMt)	M6010B ICP	0.01	B		mg/L	0.01	0.05	02/14/07 4:00	msh
Selenium (MWMt)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:00	msh
Uranium (MWMt)	M6020 ICP-MS	0.0024		*	mg/L	0.0001	0.0005	02/07/07 23:13	scp
Zinc (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:00	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/05/07 0:00	srs/lwt
Extraction pH		4.78			units			02/05/07 0:00	srs/lwt
Extraction Time		31.8			hrs			02/05/07 0:00	srs/lwt
Leachate pH		6.75			units			02/05/07 0:00	srs/lwt
Leachate Volume		4970			mL			02/05/07 0:00	srs/lwt
Particle Size over 5 cm		65			%			02/05/07 0:00	srs/lwt
Retained Moisture		15.6			%			02/05/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 6-8(B)

ACZ Sample ID: L60753-02

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 21:26	jjr
Arsenic (MWMt)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:04	msh
Cadmium (MWMt)	M6010B ICP	7.290		*	mg/L	0.005	0.02	02/14/07 4:04	msh
Copper (MWMt)	M6010B ICP	56.90		*	mg/L	0.01	0.05	02/14/07 4:04	msh
Molybdenum (MWMt)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:04	msh
Selenium (MWMt)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:04	msh
Uranium (MWMt)	M6020 ICP-MS	0.0440		*	mg/L	0.0001	0.0005	02/07/07 23:26	scp
Zinc (MWMt)	M6010B ICP	4.90		*	mg/L	0.01	0.05	02/14/07 4:04	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/05/07 0:00	srs/lwt
Extraction pH		4.78			units			02/05/07 0:00	srs/lwt
Extraction Time		31.8			hrs			02/05/07 0:00	srs/lwt
Leachate pH		4.07			units			02/05/07 0:00	srs/lwt
Leachate Volume		4920			mL			02/05/07 0:00	srs/lwt
Particle Size over 5 cm		46			%			02/05/07 0:00	srs/lwt
Retained Moisture		20.4			%			02/05/07 0:00	srs/lwt



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 9-10(C)

ACZ Sample ID: **L60753-03**

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 21:34	jir
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:18	msh
Cadmium (MWMT)	M6010B ICP	3.880		*	mg/L	0.005	0.02	02/14/07 4:18	msh
Copper (MWMT)	M6010B ICP	3.42		*	mg/L	0.01	0.05	02/14/07 4:18	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:18	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:18	msh
Uranium (MWMT)	M6020 ICP-MS	0.1110		*	mg/L	0.0001	0.0005	02/07/07 23:35	scp
Zinc (MWMT)	M6010B ICP	14.90		*	mg/L	0.01	0.05	02/14/07 4:18	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/06/07 0:00	srs/lwt
Extraction pH		4.78			units			02/06/07 0:00	srs/lwt
Extraction Time		30.3			hrs			02/06/07 0:00	srs/lwt
Leachate pH		4.03			units			02/06/07 0:00	srs/lwt
Leachate Volume		5170			mL			02/06/07 0:00	srs/lwt
Particle Size over 5 cm		78			%			02/06/07 0:00	srs/lwt
Retained Moisture		18			%			02/06/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 14(D)

ACZ Sample ID: L60753-04

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0005	B		mg/L	0.0004	0.002	02/08/07 21:47	jir
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:28	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	02/14/07 4:28	msh
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:28	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:28	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:28	msh
Uranium (MWMT)	M6020 ICP-MS	0.0013		*	mg/L	0.0001	0.0005	02/07/07 23:49	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:28	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/06/07 0:00	srs/lwt
Extraction pH		4.78			units			02/06/07 0:00	srs/lwt
Extraction Time		31.8			hrs			02/06/07 0:00	srs/lwt
Leachate pH		6.5			units			02/06/07 0:00	srs/lwt
Leachate Volume		5060			mL			02/06/07 0:00	srs/lwt
Particle Size over 5 cm		33			%			02/06/07 0:00	srs/lwt
Retained Moisture		6.27			%			02/06/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

### Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT BED 3-5(E)

ACZ Sample ID: L60753-05

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 21:52	jjr
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:32	msh
Cadmium (MWMT)	M6010B ICP	1.080		*	mg/L	0.005	0.02	02/14/07 4:32	msh
Copper (MWMT)	M6010B ICP	0.81		*	mg/L	0.01	0.05	02/14/07 4:32	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:32	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:32	msh
Uranium (MWMT)	M6020 ICP-MS	0.0010		*	mg/L	0.0001	0.0005	02/07/07 23:54	scp
Zinc (MWMT)	M6010B ICP	5.49		*	mg/L	0.01	0.05	02/14/07 4:32	msh

#### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/06/07 0:00	srs/lwt
Extraction pH		4.78			units			02/06/07 0:00	srs/lwt
Extraction Time		34.8			hrs			02/06/07 0:00	srs/lwt
Leachate pH		6.62			units			02/06/07 0:00	srs/lwt
Leachate Volume		5050			mL			02/06/07 0:00	srs/lwt
Particle Size over 5 cm		75			%			02/06/07 0:00	srs/lwt
Retained Moisture		15.2			%			02/06/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487(800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTW 6340 BED6-8(F)

ACZ Sample ID: **L60753-06**

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0008	B		mg/L	0.0004	0.002	02/08/07 21:56	jlr
Arsenic (MWMT)	M6010B ICP	0.06	B		mg/L	0.04	0.2	02/14/07 4:36	msh
Cadmium (MWMT)	M6010B ICP	0.060		*	mg/L	0.005	0.02	02/14/07 4:36	msh
Copper (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	02/14/07 4:36	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:36	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:36	msh
Uranium (MWMT)	M6020 ICP-MS	0.0082		*	mg/L	0.0001	0.0005	02/07/07 23:58	scp
Zinc (MWMT)	M6010B ICP	1.89		*	mg/L	0.01	0.05	02/14/07 4:36	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/06/07 0:00	srs/lwt
Extraction pH		4.78			units			02/06/07 0:00	srs/lwt
Extraction Time		32.3			hrs			02/06/07 0:00	srs/lwt
Leachate pH		3.2			units			02/06/07 0:00	srs/lwt
Leachate Volume		4920			mL			02/06/07 0:00	srs/lwt
Particle Size over 5 cm		60			%			02/06/07 0:00	srs/lwt
Retained Moisture		18.5			%			02/06/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTW 6340 BED3-5(G)

ACZ Sample ID: L60753-07

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 22:00	jjr
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:39	msh
Cadmium (MWMT)	M6010B ICP	0.014	B	*	mg/L	0.005	0.02	02/14/07 4:39	msh
Copper (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.01	0.05	02/14/07 4:39	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:39	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:39	msh
Uranium (MWMT)	M6020 ICP-MS	0.0093		*	mg/L	0.0001	0.0005	02/08/07 0:03	scp
Zinc (MWMT)	M6010B ICP	0.37		*	mg/L	0.01	0.05	02/14/07 4:39	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/06/07 0:00	srs/lwt
Extraction pH		4.78			units			02/06/07 0:00	srs/lwt
Extraction Time		31.8			hrs			02/06/07 0:00	srs/lwt
Leachate pH		3.95			units			02/06/07 0:00	srs/lwt
Leachate Volume		5140			mL			02/06/07 0:00	srs/lwt
Particle Size over 5 cm		60			%			02/06/07 0:00	srs/lwt
Retained Moisture		14.9			%			02/06/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTW6340 BED9-10(H)

ACZ Sample ID: L60753-08

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 22:05	jjr
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:43	msh
Cadmium (MWMT)	M6010B ICP	0.029		*	mg/L	0.005	0.02	02/14/07 4:43	msh
Copper (MWMT)	M6010B ICP	0.06		*	mg/L	0.01	0.05	02/14/07 4:43	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:43	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:43	msh
Uranium (MWMT)	M6020 ICP-MS	0.0176		*	mg/L	0.0001	0.0005	02/08/07 0:07	scp
Zinc (MWMT)	M6010B ICP	1.44		*	mg/L	0.01	0.05	02/14/07 4:43	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/07/07 0:00	srs/lwt
Extraction pH		4.78			units			02/07/07 0:00	srs/lwt
Extraction Time		35.3			hrs			02/07/07 0:00	srs/lwt
Leachate pH		4.13			units			02/07/07 0:00	srs/lwt
Leachate Volume		5030			mL			02/07/07 0:00	srs/lwt
Particle Size over 5 cm		66			%			02/07/07 0:00	srs/lwt
Retained Moisture		19			%			02/07/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W BED 14(I)

ACZ Sample ID: L60753-09

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 22:09	jjr
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:46	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	02/14/07 4:46	msh
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:46	msh
Molybdenum (MWMT)	M6010B ICP	0.01	B		mg/L	0.01	0.05	02/14/07 4:46	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:46	msh
Uranium (MWMT)	M6020 ICP-MS	0.0018		*	mg/L	0.0001	0.0005	02/08/07 0:12	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:46	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/07/07 0:00	srs/lwt
Extraction pH		4.78			units			02/07/07 0:00	srs/lwt
Extraction Time		29			hrs			02/07/07 0:00	srs/lwt
Leachate pH		7.83			units			02/07/07 0:00	srs/lwt
Leachate Volume		5010			mL			02/07/07 0:00	srs/lwt
Particle Size over 5 cm		58			%			02/07/07 0:00	srs/lwt
Retained Moisture		7.03			%			02/07/07 0:00	srs/lwt

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT E6300 BED14 (J)

ACZ Sample ID: L60753-10

Date Sampled: 10/01/06 00:00

Date Received: 01/17/07

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	02/08/07 22:14	jjr
Arsenic (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:50	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	02/14/07 4:50	msh
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:50	msh
Molybdenum (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	02/14/07 4:50	msh
Selenium (MWMT)	M6010B ICP		U		mg/L	0.04	0.2	02/14/07 4:50	msh
Uranium (MWMT)	M6020 ICP-MS	0.0014		*	mg/L	0.0001	0.0005	02/08/07 0:16	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	02/14/07 4:50	msh

### Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			02/07/07 0:00	srs/lwt
Extraction pH		4.78			units			02/07/07 0:00	srs/lwt
Extraction Time		29			hrs			02/07/07 0:00	srs/lwt
Leachate pH		8			units			02/07/07 0:00	srs/lwt
Leachate Volume		5010			mL			02/07/07 0:00	srs/lwt
Particle Size over 5 cm		65			%			02/07/07 0:00	srs/lwt
Retained Moisture		4.99			%			02/07/07 0:00	srs/lwt



**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

<i>B</i>	Analyte concentration detected at a value between MDL and PQL.
<i>H</i>	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
<i>R</i>	Poor spike recovery accepted because the other spike in the set fell within the given limits.
<i>T</i>	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
<i>U</i>	Analyte was analyzed for but not detected at the indicated MDL
<i>V</i>	High blank data accepted because sample concentration is 10 times higher than blank concentration
<i>W</i>	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
<i>X</i>	Quality control sample is out of control.
<i>Z</i>	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60753**

Project ID:

**Antimony (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220219</b>													
WG220219ICV	ICV	02/08/07 20:46	MS070108-2	.02		.0201	mg/L	100.5	90	110			
WG220219ICB	ICB	02/08/07 20:50				U	mg/L		-0.0012	0.0012			
WG219963PBS	PBS	02/08/07 21:08				U	mg/L		-0.0012	0.0012			
L60753-01AS	AS	02/08/07 21:17	MS061218-3	.00625	.0005	.00582	mg/L	85.1	75	125			
L60753-01ASD	ASD	02/08/07 21:21	MS061218-3	.00625	.0005	.00586	mg/L	85.8	75	125	0.68	20	

**Arsenic (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	4		4.084	mg/L	102.1	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.12	0.12			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.12	0.12			
L60753-02AS	AS	02/14/07 4:11	II070119-5	1	U	1.067	mg/L	106.7	75	125			
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	1	U	1.109	mg/L	110.9	75	125	3.86	20	

**Cadmium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	2		1.9762	mg/L	98.8	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.015	0.015			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.015	0.015			
L60753-02AS	AS	02/14/07 4:11	II070119-5	.5	7.29	7.5287	mg/L	47.7	75	125			M3
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	.5	7.29	7.7182	mg/L	85.6	75	125	2.49	20	

**Copper (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	2		1.972	mg/L	98.6	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.03	0.03			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.03	0.03			
L60753-02AS	AS	02/14/07 4:11	II070119-5	.5	56.9	53.681	mg/L	-643.8	75	125			M3
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	.5	56.9	55.577	mg/L	-264.6	75	125	3.47	20	M3

**Molybdenum (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	2		2.042	mg/L	102.1	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.03	0.03			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.03	0.03			
L60753-02AS	AS	02/14/07 4:11	II070119-5	.5	U	.509	mg/L	101.8	75	125			
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	.5	U	.521	mg/L	104.2	75	125	2.33	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60753**

Project ID:

**Selenium (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	4		4.018	mg/L	100.5	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.12	0.12			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.12	0.12			
L60753-02AS	AS	02/14/07 4:11	II070119-5	1	U	1.02	mg/L	102	75	125			
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	1	U	1.047	mg/L	104.7	75	125	2.61	20	

**Uranium (MWMT)****M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220180</b>													
WG220180ICV	ICV	02/07/07 22:45	MS070108-2	.05		.05325	mg/L	106.5	90	110			
WG220180ICB	ICB	02/07/07 22:50				U	mg/L		-0.0003	0.0003			
WG219963PBS	PBS	02/07/07 23:08				.00019	mg/L		-0.0003	0.0003			
L60753-01AS	AS	02/07/07 23:17	MS061218-3	.025	.0024	.02701	mg/L	98.4	75	125			
L60753-01ASD	ASD	02/07/07 23:22	MS061218-3	.025	.0024	.02762	mg/L	100.9	75	125	2.23	20	

**Zinc (MWMT)****M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG220388</b>													
WG220388ICV	ICV	02/14/07 3:39	II070116-1	2		1.97	mg/L	98.5	90	110			
WG220388ICB	ICB	02/14/07 3:43				U	mg/L		-0.03	0.03			
WG219963PBS	PBS	02/14/07 3:57				U	mg/L		-0.03	0.03			
L60753-02AS	AS	02/14/07 4:11	II070119-5	.5	4.9	5.236	mg/L	67.2	75	125			M3
L60753-02ASD	ASD	02/14/07 4:14	II070119-5	.5	4.9	5.389	mg/L	97.8	75	125	2.88	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60753**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L60753-01	WG220388	Cadmium (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-02	WG220388	Cadmium (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-03	WG220388	Cadmium (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-04	WG220388	Cadmium (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-05	WG220388	Cadmium (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60753**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L60753-06	WG220388	Cadmium (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-07	WG220388	Cadmium (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-08	WG220388	Cadmium (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-09	WG220388	Cadmium (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
L60753-10	WG220388	Cadmium (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Copper (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
		Zinc (MWMVT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L60753**

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MWMU)

M6020 ICP-MS

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L60753

Date Received: 1/17/2007

Received By:

Date Printed: 1/17/2007

### Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?			X
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

### Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1457	3.2	16
329	4	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

### Notes

# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L60753

Date Received: 1/17/2007

Received By:

### Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L60753-01	CENT BED 11-13(A)									X		
L60753-02	CENT BED 6-8(B)									X		
L60753-03	CENT BED 9-10(C)									X		
L60753-04	CENT BED 14(D)									X		
L60753-05	CENT BED 3-5(E)									X		
L60753-06	SENTW 6340 BED6-8(F)									X		
L60753-07	SENTW 6340 BED3-5(G)									X		
L60753-08	SENTW6340 BED9-10(H)									X		
L60753-09	SENT W BED 14(I)									X		
L60753-10	SENT E6300 BED14 (J)									X		

### Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



L60753

Lisbon Valley Mining Co.				Chain of Custody Record			
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to:  920 S County Rd 313 La Sal, Utah 84530			
Lisbon Valley Copper Project			ANALYSES				
SAMPLE NUMBER	DATE	TIME	MWMP				Number of Containers
							ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590
							Remarks / Comments
Cent 6400 Bed 11-13 (A)	Oct 06		x				1 Composite samples per suffix (ie. A-J).
Cent 6380 Bed 11-13 (A)	Nov 06		x				1 As Above
Cent 6380 Bed 11-13 (A)	Dec 06		x				1 As Above
Cent 6380 Bed 6-8 (B)	Nov 06		x				1 As Above
Cent 6400 Bed 6-8 (B)	Oct 06		x				1 As Above
Cent 6380 Bed 6-8 (B)	Dec 06		x				1 As Above
Cent 6400 Bed 9-10 (C)	Oct 06		x				1 As Above
Cent 6380 Bed 9-10 (C)	Dec 06		x				1 As Above
Cent 6380 Bed 9-10 (C)	Nov 06		x				1 As Above
Cent 6380 Bed 14 (D)	Dec 06		x				1 As Above
Cent 6380 Bed 14 (D)	Nov 06		x				1 As Above
Cent 6400 Bed 14 (D)	Oct 06		x				1 As Above
Cent 6400 Bed 3-5 (E)	Oct 06		x				1 As Above
Cent 6380 Bed 3-5 (E)	Dec 06		x				1 As Above
Cent 6380 Bed 3-5 (E)	Nov 06		x				1 As Above
Sent W 6340 Bed 6-8 (F)	Oct 06		x				1 As Above
Sampled By: Charles Bauer			Total Number of Containers			16	
Sampler's Signature <i>Charles Bauer</i>			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223				
Relinquished By: Lantz Indergard			Date / Time: 1-15-07 10:35			Received By: <i>MIS</i> Date / Time: 1-17-07 11:01	
Method of Shipment: UPS			Comments: These samples are to be composited to represent 4th Qtr 2006 The letter suffix identifies one analysis of up to 3 samples				

## Lisbon Valley Mining Co.

P.O. Box 248  
920 S. County Rd. 313  
Larisa, Utah 84530  
Phone: (435) 686-9950

## Chain of Custody Record

Sent report with labo...  
920 S. County Rd 313  
Larisa, Utah 84530

Lisbon Valley Copper Project

## ANALYSES

SAMPLE NUMBER

DATE

TIME

MWMP

Number of  
Containers

Remarks / Comments

Sent E 6300 Bed 14 (J)

Jan 07

x

1

Composite samples per suffix (ie. A-J)

Sent W 6340 Bed 3-5 (G)

Jan 07

x

1

As Above

Sent W 6340 Bed 9-10 (H)

Jan 07

x

1

As Above

Sent W 6340 Bed 6-8 (F)

Jan 07

x

1

As Above

Sampled By:

Charles Bauer

Sampler's Signature

Total Number of  
Containers

4

Contact Person:

Lantz M Indergard

Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223

Relinquished By:

Lantz Indergard

Date / Time:

Received By:

Date / Time: 1/30/07

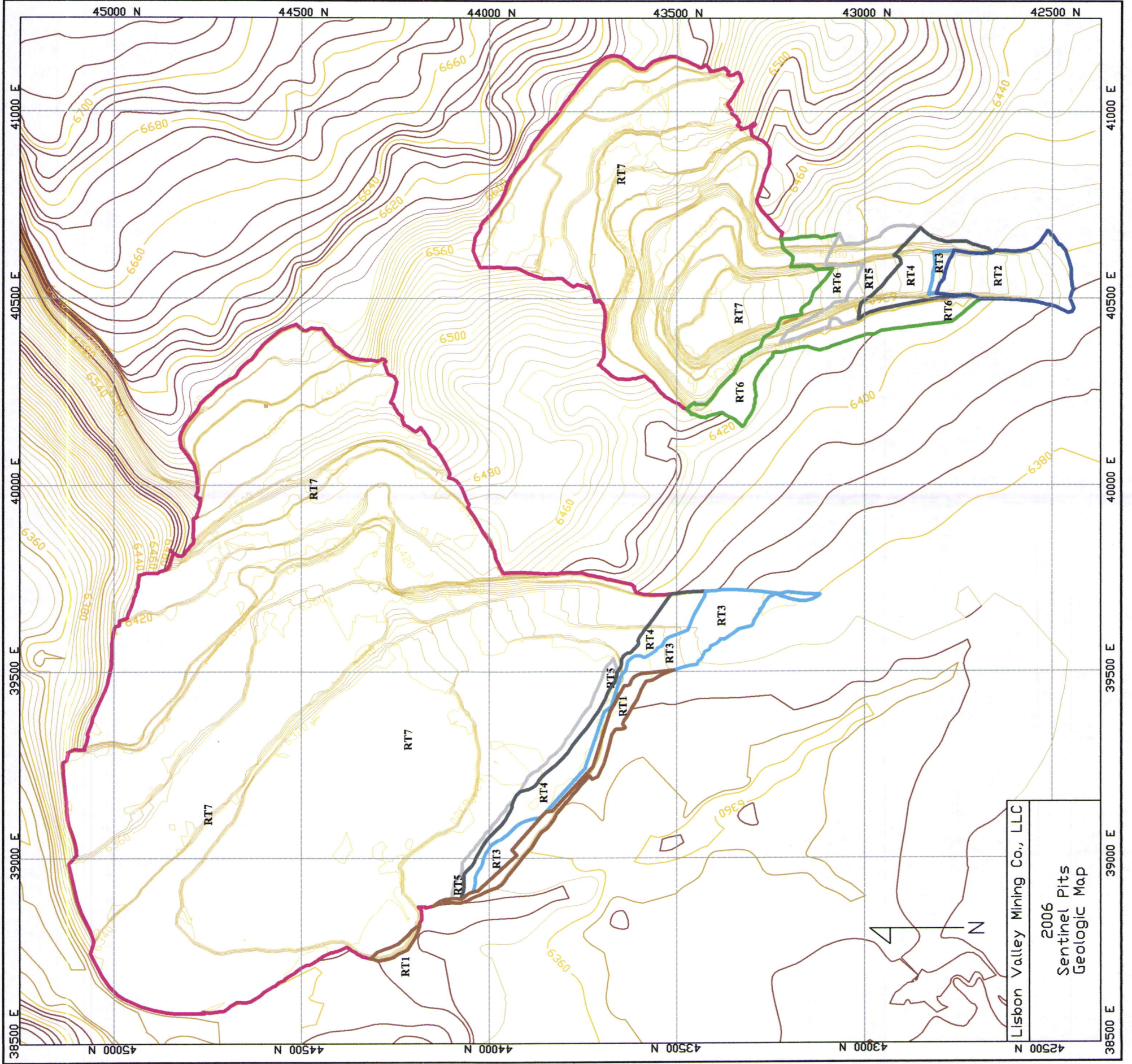
12:03

Method of Shipment:  
UPS

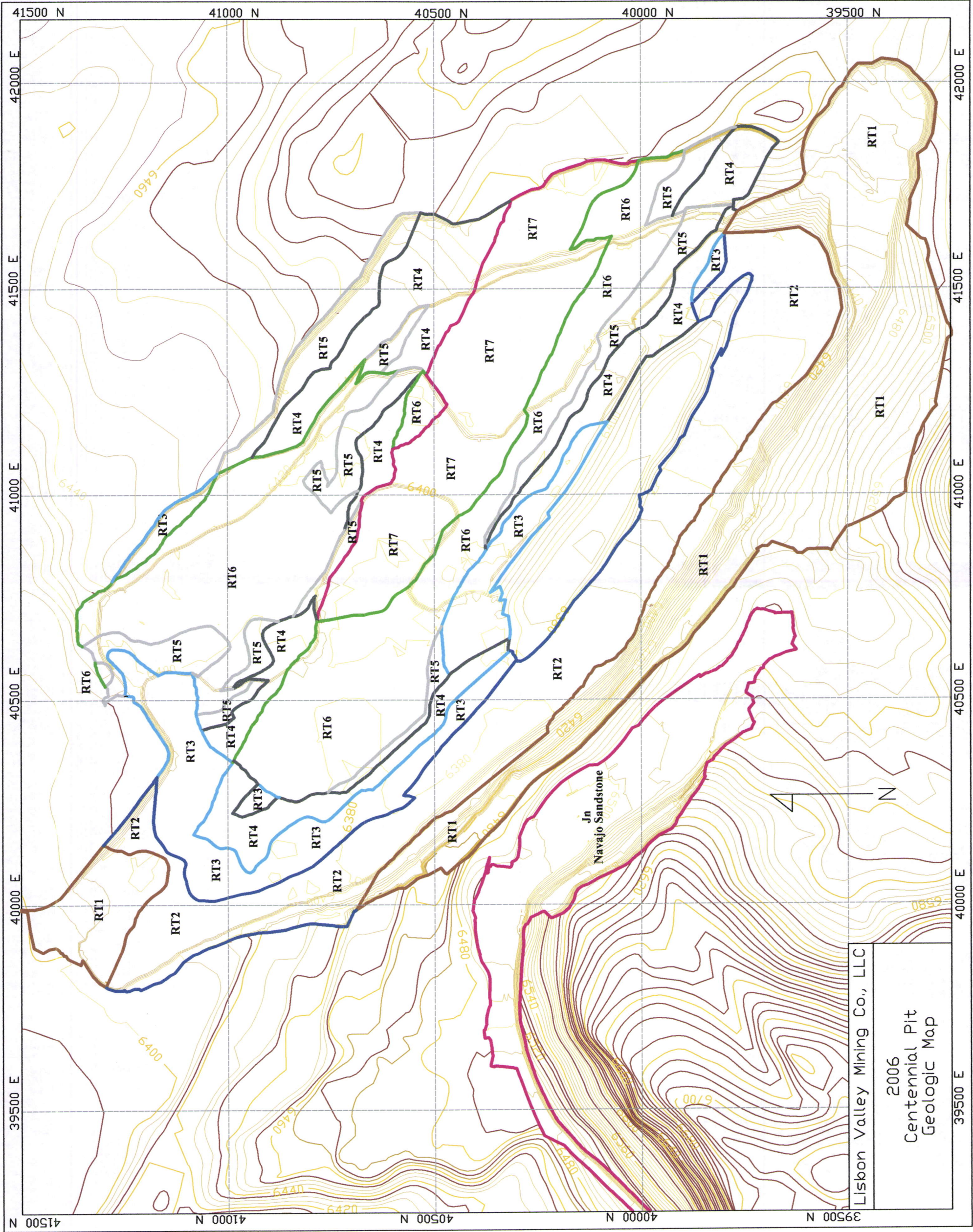
Comments:

These samples are to be composited to represent 4th Qtr 2006  
Samples were added to provide sufficient sample volume.









Lisbon Valley Mining Co., LLC

2006  
Centennial Pit  
Geologic Map



This page is a reference page used to track documents internally for the Division of Oil, Gas and Mining

Mine Permit Number M0370088 Mine Name Lisbon Valley  
Operator Lisbon Valley Mining Co. Date MARCH 7, 2007  
TO \_\_\_\_\_ FROM \_\_\_\_\_

☐ CONFIDENTIAL ☐ BOND CLOSURE ☐ LARGE MAPS ☒ EXPANDABLE  
☐ MULTIPUL DOCUMENT TRACKING SHEET ☐ NEW APPROVED NOI  
☐ AMENDMENT ☐ OTHER \_\_\_\_\_

Description

YEAR-Record Number

☐ NOI ☒ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

2006 Waste Rock monitoring Report

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ TEXT/ 8 1/2 X 11 MAP PAGES ☐ 11 X 17 MAPS ☐ LARGE MAP

COMMENTS: \_\_\_\_\_

CC: \_\_\_\_\_